

8-3-1894

Letter from Hitchings & Co. to John R. Johnson and Specifications For Range of Palm and Green Houses For Ogden Goelet by Hitchings & Co

Hitchings & Co.

Follow this and additional works at: <http://digitalcommons.salve.edu/ochre-court>

Recommended Citation

Hitchings & Co., "Letter from Hitchings & Co. to John R. Johnson and Specifications For Range of Palm and Green Houses For Ogden Goelet by Hitchings & Co" (1894). *Series 1. Ochre Court, Newport, RI, 1892-1897*. Book 244.
<http://digitalcommons.salve.edu/ochre-court/244>

This Book is brought to you for free and open access by the Goelet Family Papers at Digital Commons @ Salve Regina. It has been accepted for inclusion in Series 1. Ochre Court, Newport, RI, 1892-1897 by an authorized administrator of Digital Commons @ Salve Regina. For more information, please contact digitalcommons@salve.edu.

GREENHOUSE HEATING AND VENTILATING.

HORTICULTURAL ARCHITECTURE AND BUILDING.

DWELLING WARMING BY THE HOT WATER SYSTEM.

HITCHINGS & CO.,

233 MERCER STREET,

NEW YORK, August 3d, 1894.

Mr. J. R. Johnson,
Care Ogden Goelet, Esq.,
Newport, R. I.

Dear Sir:-

Agreeable to your request we herewith submit plans for the range of greenhouses to be erected on the estate of Mr. Ogden Goelet, Leroy St., Newport, R. I.

We have followed in detail the general arrangement of the houses given by you - which arrangement meets with our approval - and have made the elevations to give the best results in working and in artistic appearance.

We propose to furnish, deliver and erect the range, as indicated, and as explained in accompanying specifications, exclusive of any mason work, drainage and grading of land, for the sum of Twenty-two thousand, one hundred and ninety (\$22190.00) Dollars. This is for the range without the lantern on the Palm House. If the lantern be constructed on the Palm House, the cost would be \$500.00 additional. For the sake of ventilation and a richer appearance, we would strongly advise the construction with the lantern ~~to that without~~.

A cheaper range might be built, but we would not advise such a course, as the greenhouses should be on a par with the other buildings on the premises, and also surrounding structures.

Yours respectfully,
Hitchings & Co.,

per

Henry W. Hibbons

SPECIFICATIONS

Of material, labor, etc., required in the erection of a range of Palm and Greenhouses for Ogden Goelet, Esq., Newport, R.I.

IRON FRAME:-

Upon brick foundations furnished by owner, the foundation lines of which, would be to details and measurements furnished by Hitchings & Co., we set in Portland cement our heavy cast iron sill, weighing about 15 pounds to the foot, to which will be securely and substantially bolted the all iron frame, consisting of cast iron posts (no ordinary flat, angle, or tee iron posts would be used in this construction: all posts would be of cast iron, of an exceedingly neat and strong design) rafters, brackets, purlins, door posts, PATENT NON-FREEZABLE CAST IRON GUTTERS, etc. The entire frame to be self-supporting, no columns, cross truss rods will be used. With correct construction such will not be needed, as their tendency is to obstruct benches and mar the artistic effect of the interior of the houses; except in the grapery and peach house, where a light column under each rafter is desirable.

WOODWORK:-

All woodwork entering into the construction of the greenhouses to be of positively CLEAR white pine. All bars to be correctly and smoothly milled, with moulded edges and furnished throughout, where necessary, with grooves, etc., for carrying off the waters of condensation. Our reason for the use of white pine is that with such we are enable to produce a perfect finish, which cannot be secured by the use of cypress or other woods, usual in greenhouse construction.

VENTILATION:-

Ventilating sashes 3' deep running continuously along each side of the ridge of Palm, Grapery, Peach, Rose, large Green and Stove Houses; and 2'6 continuous sashes running along each side of the ridge of small Green and Propagating Houses. Continuous lines of sashes below the gutters on all houses will be provided: all to be operated by our patent apparatus.

The workroom will be provided with independent ventilating arrangement, which will give a perfect ventilation.

GLASS:-

All glass throughout to be of double, thick, second quality, French, free from burning specs and other defects. All to be set in pure linseed oil putty and Atlantic white lead, and held by solid zinc shoenail points. ALL GLASS ON THE CURVED PORTIONS OF ROOFS WILL BE BENT TO FIT THE CURVES: no straight glass glazing on curved lines will be allowed, as it is impossible in this manner to secure a water-tight roof, or a neat appearance. The glass on the roofs of the Palm and Stove Houses will be ground, to break the burning effects of the sun. The roof of the Propagating House will also be glazed with ground glass, if desired.

H E A T I N G :-

The heating apparatus will consist of three of our Non 19 improved Corrugated fire-box boilers, suitably connected to lines of 4" external diameter cast iron heating pipe, so arranged in each of the houses, as to produce a temperature in all of 60 to 65 degrees, and in the Palm and Stove Houses of 65 to 70 degrees in zero weather. Each house or section of house will be provided with valves, so arranged as to insure a perfect and absolute control of the temperature in each house or section.

Large mains will be provided, where advisable, in order to secure a perfect and unobstructed flow of water from the boilers. A suitable radiator will be placed in the workroom.

As it would not be practicable to place the entire heating pipes necessary for the Palm House below the benches, we propose to set a portion of same ~~underneath~~ in a protected trench under the line of the walks, and cover same with a substantial cast iron grating. This not only gives a perfect heat and leaves the centre part of the floor unobstructed for the accomodation of large plants, but also insures a dry walk at all times, which, in a house of this description, is a very essential matter.

The system of heating will be that known as open air circulation (no pressure system). This is the only system to give perfect results, while its cost is slightly in excess of the pressure system. We strongly advise giving it the preference.

B E N C H E S :-

Benches throughout will be of our substantial iron frame construction, with ADJUSTABLE pipe legs. The bottoms of these benches will be of patent drainage tiles, or of THREE-QUARTER INCH blue slate, planed smooth on both sides, with edges neatly sawn to fit the frames, as may be decided by the gardener. The usual arrangement, however, with benches to be used for potting plants being slate bottoms, and those for propagating, or in which soil is to be placed, to have tile bottoms.

W O R K R O O M :-

For the floor of the workroom over the boiler cellar, we provide the necessary iron beams for the construction by owner of the concrete floor. We also provide iron stair-way leading to the cellar, with hand rails, balusters, etc. An office will be partitioned off with ceiled or glazed partitions, as desired, containing closets and writing desk for the use of the gardener in keeping seeds, catalogues, books, etc.

Convenient work benches will be provided in the potting room with necessary pot and earth racks beneath. The construction of the workroom will be identical with that of the Palm House, except that the roof will be ceiled and covered with illuminum shingles.

VINE HANGERS:-

In the Grapery and Peach Houses our improved adjustable vine hangers will be attached to the roofs in the usual manner, the spacing of the wires being in accordance with the wishes of the gardener.

COLD WATER SERVICE:-

A complete system of galvanized cold water piping will be run through the entire range, two plated compression hose bibs being provided in each house or section of house, in the potting room and in boiler cellar. A cast iron sink will be provided in potting room below the hose bib, with suitable relief pipes, drip etc. (we exclude connection of cold water pipes outside the buildings from the buildings to the nearest main.

P A I N T I N G:-

All structural material will receive one coat of paint before shipment- iron work of anti-corrosive paint, wood-work of Atlantic white lead. After erection all woodwork will receive two coats of Atlantic white lead, and iron work two coats of dark French gray, to produce slight contrast between wood and iron. The benches in all cases will be painted dark bronze green.

H A R D W A R E:-

All door hardware throughout will be of heavy solid brass. Ventilators will all be hung on steel hinges, galvanized, with brass centres. All nails will be galvanized. Glazing points to be of solid zinc, shoenail pattern.

C R E S T I N G:-

A neat cast iron cresting of suitable height will be provided on the ridge of all houses, with neat, substantial finials.

All details not mentioned in the specifications will be carried out after our standard method of construction. Minor details not entailing material additional expense will be varied to suit the desires of owner or his agent, without additional cost.

F I N I S H:-

All workmanship and material throughout to be of the best of their several kinds only, and the structure left complete in every respect, as specified, for the sum named, with the exception of masonry, grading and excavating of land, drainage and water service outside of buildings.

(Mr. O. G., 4.)

We have excluded from our proposal the mason work for the reason that this portion of the work is usually undertaken by owner's architects, the requisite details necessary for the perfect fit of the iron frames being furnished by us. If it is desired, however, we will be pleased to submit formal proposal and specifications for this portion of the work.

We would say that we have gone over the matter very carefully, and would approximate the cost of the requisite mason work using good, hard, clean, well-burnt bricks throughout above the ground, stone for all foundations below the ground, all work being laid in cement mortar, concrete and cement floors, walks, piers and conduits for heating pipes, interior drainage, chimney, etc., stone door sills, and all other details entering into this portion of the work, at about \$6120.00.

If pressed face brick be used on all exterior walls, the cost would be about \$350.00 additional.

Yours respectfully,
Hitchings & Co.,

per

Wm. J. Hibbons.

SPECIFICATIONS

For

Range of Palm & Green
Houses

For

Ogden Goelet, Esq.,

Newport, R. I.

By

HITCHINGS & CO.,
235 Mercer St.,
N. Y. City.